

Abstract of the Disclosure

In order to provide a filter device capable of maintaining stable optical characteristics for an extended period of time and to provide also a photosensor using the filter device, a photosensor having a filter function includes a filter device (1) having a colored glass filter (3) and configured for permitting transmission of light of a predetermined wavelength range including a detection target wavelength range and a light receiving device (2) for receiving the light transmitted through the filter device (1). The filter device (1) includes a first interference filter structure (4) comprised of a plurality of light transmitting layers (4a), (4b) stacked on each other, the first interference filter structure (4) being deposited on a face of the colored glass filter (3). The light receiving device (2) includes a semiconductor photodetector structure having one or more semiconductor layers, a light receiving area being formed in the one or more semiconductor layers within the semiconductor photodetector structure. The one or more semiconductor layers forming the semiconductor photodetector structure contain $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{N}$ ($0 \leq x \leq 0.21$, $0 \leq y \leq 1$).